

TITLE 329 SOLID WASTE MANAGEMENT BOARD

PROPOSED RULE AS PRELIMINARILY ADOPTED PROPOSED FOR FINAL ADOPTION

LSA Document #00-255

DIGEST

Adds 329 IAC 3.1-6-6 to conditionally exclude from regulation under 329 IAC 3.1 electric arc furnace dust that is treated to be nonhazardous by Heritage Environmental Services, LLC at Nucor Steel Corporation, Crawfordsville, Indiana. Effective 30 days after filing with the secretary of state.

HISTORY

Findings and Determination of the Commissioner Pursuant to IC 13-14-9-7, Tentative Recommendation for Rulemaking, Second Notice of Comment Period, and Notice of First Public Hearing: December 1, 2000, Indiana Register (24 IR 804).

Date of First Public Hearing: March 20, 2001.

Proposed Rule and Notice of Second Public Hearing: May 1, 2001, Indiana Register (24 IR 2515).

329 IAC 3.1-6-6

SECTION 1. 329 IAC 3.1-6-6 IS ADDED TO READ AS FOLLOWS:

329 IAC 3.1-6-6 Waste excluded from regulation; Heritage Environmental Services, LLC and Nucor Steel Corporation, Crawfordsville, Indiana

Authority: IC 13-14-8; IC 13-22-2

Affected: IC 13-22

Sec. 6. Electric arc furnace dust (EAFD), hazardous waste code K061, that is generated by Heritage Environmental Services, LLC (Heritage) and Nucor Steel, Division of Nucor, Corporation (Nucor) at Nucor's Crawfordsville, Indiana plant, and treated to be nonhazardous is excluded from regulation under this article so long as management of the waste complies with all of the following conditions:

(1) Delisting levels for the waste excluded by this section are as follows:

(A) The constituent concentrations measured in any of the extracts required by subdivision (2) must not exceed any of the levels listed in Table 1:

**Table 1. Maximum Constituent
Concentrations in TCLP Extracts**

Antimony	0.206 mg/L
Arsenic	0.0936 mg/L
Barium	55.7 mg/L
Beryllium	0.416 mg/L
Cadmium	0.15 mg/L

Chromium (total)	1.55 mg/L
Lead	5.0 mg/L
Mercury	0.149 mg/L
Nickel	28.3 mg/L
Selenium	0.58 mg/L
Silver	3.84 mg/L
Thallium	0.088 mg/L
Vanadium	21.1 mg/L
Zinc	280 mg/L

(B) Total mercury in the treated EAFD must not exceed one (1.0) milligram per kilogram.

(2) Heritage shall demonstrate on a monthly basis that the constituents in the treated EAFD do not exceed the delisting levels in subdivision (1) as follows:

(A) Heritage shall collect two (2) representative samples of the treated EAFD each month. Each sample must be analyzed using all of the following tests:

(i) Method 1311, Toxicity Characteristic Leaching Procedure (TCLP), described in U.S. Environmental Protection Agency Publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 3rd Edition (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), and III (December 1996) (SW-846).

(ii) Method 1311, described in item (i), substituting an extraction fluid with a pH of 12.0 ± 0.05 standard units for the normal extraction fluid. Heritage may remove dissolved oxygen to less than five tenths (0.5) parts per million by the addition of a stoichiometric amount of sodium hydrosulfite.

(iii) Method 7471A, Mercury in Solid or Semi-Solid Waste (Manual Cold-Vapor Technique), described in SW-846.

(B) Detection levels must be less than the delisting levels in subdivision (1).

(C) Heritage must comply with Chapter 1, "Quality Control," of SW-846.

U.S. Environmental Protection Agency Publication SW-846 is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(3) Changes in the manufacturing process or the treatment process must be managed as follows:

(A) Heritage must notify the department in writing if any of the following occur:

(i) If Nucor changes the manufacturing process or chemicals used in the manufacturing process from those described in the petition for delisting.

(ii) If Heritage changes the treatment process or the chemicals used in the treatment process from those described in the petition for delisting.

(B) Heritage must handle all wastes generated after any process change as hazardous waste until all of the following occur:

(i) Heritage has demonstrated that:

(AA) the wastes continue to meet all delisting levels in subdivision (1); and

(BB) no new hazardous constituents listed in 40 CFR Part 261, Appendix VIII have been introduced.

(ii) Heritage has received written approval from the department to continue to

- manage the treated EAFD under this exclusion.
- (4) Heritage must submit an annual report that summarizes the data obtained through monthly verification testing to IDEM by February 1 of each year. The report must include the results of each month's analysis required by subdivision (2) for the previous calendar year.
- (5) Heritage must compile, summarize, and maintain records of operating conditions and analytical data. The records must be maintained for a minimum of five years. The records must be made available for inspection by the department during normal working hours.
- (6) All data required by subdivisions (4) and (5) must be accompanied by a signed copy of the certification statement in 40 CFR 260.22(i)(12).
- (7) The treated EAFD must be disposed of in accordance with:
- (A) 329 IAC 10; or
 - (B) this article.
- (8) Solid waste landfill units permitted under 329 IAC 10 that accept the treated EAFD must comply with the ground water monitoring requirements of 329 IAC 10-21.
- (9) The treated EAFD must be covered in accordance with 329 IAC 10-20-13 through 329 IAC 10-20-14.
- (10) Only the following materials may be used as alternative daily cover over the treated EAFD:
- (A) Category B slag debris.
 - (B) Foundry sand.
 - (C) Petroleum contaminated soils.
 - (D) Fly ash.
 - (E) Conditioned fly ash.
 - (F) Coal ash.
 - (G) Uncontaminated rocks, bricks, concrete, road demolition waste materials, or dirt.
 - (H) Other materials approved in accordance with 329 IAC 10-20-14.1 for use over the treated EAFD after the effective date of this rule.
- (11) No waste that is capable of providing oxygen or acting as a source of oxygen may be disposed of in the same cell or unit as the treated EAFD.
- (12) If, at any time after disposal of the delisted waste, Heritage possesses or is otherwise made aware of any data relevant to the delisted waste indicating that any constituent identified in subdivision (1) is at a level in a test extract or in the leachate that is higher than the delisting level listed in subdivision (1), then Heritage must report such data in writing to the commissioner within ten (10) days of first possessing or being made aware of that data.
- (13) If, at any time after disposal of the treated EAFD, Heritage possesses or is otherwise made aware of any data relevant to the delisted waste indicating that any of the following constituents is at a level in the groundwater higher than the levels listed in Table 2:

**Table 2. Maximum Allowable
Concentrations in Groundwater**

Antimony	0.006 mg/L
Arsenic	0.005 mg/L
Barium	2.0 mg/L
Beryllium	0.004 mg/L
Cadmium	0.005 mg/L
Chromium	0.1 mg/L
Lead	0.015 mg/L
Mercury	0.002 mg/L
Nickel	0.753 mg/L
Selenium	0.05 mg/L
Silver	0.187 mg/L
Thallium	0.002 mg/L
Vanadium	0.263 mg/L
Zinc	11.25 mg/L
Sulfides	1.0 mg/L

then Heritage must report such data in writing to the commissioner with ten (10) days after first possessing or being made aware of that data.

(14) No more than thirty thousand (30,000) cubic yards of treated EAFD may be treated or disposed of annually under this exclusion.

(Solid Waste Management Board; 329 IAC 3.1-6-6)